## THE LURE OF MEDICAL HISTORY

SIXTEENTH CENTURY GERMAN MEDICINE\*

ARTZNEYBUCH OF HOFMEDICUS GÄBELTHOUER

PART I

By S. L. MILLARD ROSENBERG, Ph.D. Los Angeles

N the year 1596, from the press of Georgen at Tübingen (an old university town of Württemberg) there was published, at Gruppenbach, the Artzneybuch (Book of Medicines) compiled by Oswaldt Gäbelthouer, the Hofmedicus (court physician) of the Duke of Württemberg and Theck. The elaborate and illuminated title states that the work contains "remedies for practically all the ills of the human body." Some of the prescriptions, chosen almost at random from dozens of similar ones, are given below, so that the reader may gather some faint notion of the state of medicine as practiced at a ducal court three hundred—only three hundred—years ago, shortly

\*During the last summer, Professor S. L. Millard Rosenberg of the University of California at Los Angeles spent some time in Germany and there purchased several interesting volumes for the editor of California and Western Medicine. One of these is the copy of Oswaldt Gäbelthouer's "Artzneybuch," which was printed in the year 1596. This book is made the subject of this sketch. The book was written in sixteenth century German and presented many difficulties in translation. In the light of modern scientific medicine many of the prescriptions of three hundred and fifty years ago which are given in its pages are more than absurd, although here and there is found something no worse than some popular lay remedies of the present day. Some of the prescriptions also show how tenacious are the traditions of folklore medicine, since in modified form the basic ingredients are still used among certain modern peoples. This work of Gäbelthouer, who in one place in the text states he has used a certain prescription for forty-nine years, also shows to what a low state of empiricism the practice of the healing art had fallen in the sixteenth century. Brackets are used after some of the prescriptions to indicate comments by Professor Rosenberg, to whom the editor is much indebted for these translations, which are as literal as possible, and which even though they give somewhat of a shock to present-day readers, are not without value since they provide a comparison between sixteenth and twentieth century medicine. In connection with this sketch by Professor Rosenberg, the attention of readers of California and Western Medicine who are interested in the history of medicine is called to the recent book "Devils, Drugs and Doctors" by Howard W. Haggard, M. D., of Yale University, and which contains a fascinating portrayal of the development of medicine, worthy of perusal by all members of the medical profession.—

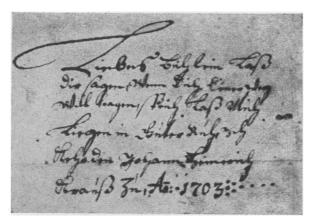


Fig. 2.—Inscription on Fly Leaf. Translation follows: Give heed, dear Book, and let me say: If one should carry you away, Cry out: "Let Be! And get out of this house! For I belong to Johann Heinrich Strauss." A. D. 1703.

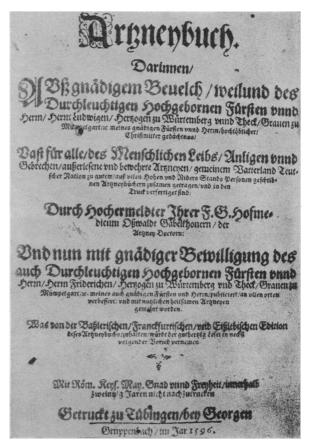


Fig. 1.—Title Page. Translation follows: BOOK OF MEDICINE WHEREIN

at the gracious command of His Highness our most praiseworthy erstwhile Lord and Master Ludwig, late Duke of Württemberg and Theck, Count of Mümpelgart, etc., and to commemorate his Right Honorable name have been collected

choice and proved medicines for the cure of almost all human ailments and infirmities, for the good of our Fatherland, the German Nation, of every person of high and low degree. Compiled from sundry medicine books prepared for the printer,

by the illustriously appointed Court Physician Oswaldt Gäbelthouer, doctor of medicine,

and now set forth
with the additional gracious permission of His Highness
our present Master and Sovereign, Friderich, Duke of
Württemberg and Theck, Count of Mümpelgart, etc.
And published in a new, amended and enlarged edition
with new, useful and curative prescriptions.
What consideration to give to the editions of Basel,
Frankfurt, and Eissleben the kindly reader will see fully
set forth in the Preface of the present work.

By Roman Imperial Grant

By Roman Imperial Grant.

Unsanctioned printing of the within book is hereby prohibited for the period of twenty years, at the peril of forfeiture of grace and freedom.

Printed by Georg at Tübingen Gruppenbach

before Harvey's discovery and about equally subsequent to Vesalius, Fallopius, the French surgeon Paré, and other pioneers of modern medicine.

Before outlining the work itself, a few words about the copy from which excerpts are made for this article. It is worm-eaten and minus one of the clasps. There are several inscriptions on the fly-leaves, and every indication that the book was much used and was not an antique in its time, but quite up to date in that corner of Europe-more's the wonder when we read it. The German of it is not easy reading for a

modern unless familiar with the dialect peculiarities of sixteenth century Württemberg.

But one of the inscriptions is in modern German; it is in ink in German script, on the second front fly-leaf:

Liebes Büchlein lass Dir sagen, Wenn Dich einer weg will tragen, Sprich: Lass mich liegen in guter Ruh, Ich folge dem Johann Heinrich Strauss zu.

Anno 1703.

Which means something like this:

Give heed, dear Book, and let me say: If one should carry you away, Cry out: "Let be! and get out of this house! For I belong to Johann Heinrich Strauss."

Anno 1703.

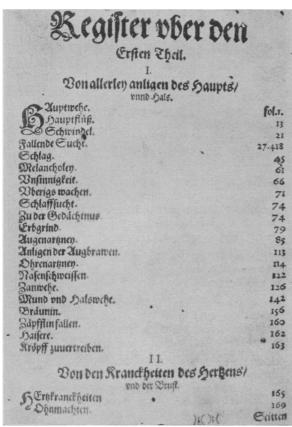


Fig. 3.—A page from the Table of Contents. Translation follows:

REGISTER OF THE FIRST PART I OF EVERY KIND OF AILMENT OF THE HEAD

AND NECK	age
Pains of the head	_1
Rheum [catarrh] of the head	13
Dizziness	21
Falling sickness [epilepsy]	418
Apoplexy	45
Melancholy	61
Insanity	66
Insomnia	71
Somnolency [stupor]	$7\overline{4}$
Failure of memory	74
Scald-head	79
Eve medicaments	85
Evebrow aliments	113
Ear medicaments	114
Discharges from the nose	122
Toothache	126
Teeth and throat troubles	142
Quinsy	156
Ailments of the uvula	160
Hoarseness	162
Goitre remedies	163
. <b>II</b>	
OF MALADIES OF THE HEART AND CHEST	
The state of the s	

Fainting spells .....

This same Strauss, two years before this doggerel, in 1701, wrote his name on one of the back fly-leaves, with elaborate embellishments of scrolls and flourishes. Below, in a different hand, and in the year of the doggerel, someone—who had not the courage to sign his sneer—wrote: "Wer das geschrieben hat, ist ein Schelm von Haus aus. Anno 1703." That is to say: "The writer of this is a born rogue." Perhaps, but he was not a secretive person, for he signed his name, and proudly added flourishes.

There are several earlier inscriptions, giving medical recipes of the type contained in the book, and applying particularly to sick dogs. One of them prescribed, for all canine ills, a cake of sour cheese, milk, and honey; this was guaranteed infallible, no matter what ailed the dog. George Meier is the name of this contributor, but the date is missing. One leaves this prescription for dogs (which is in script on one of the fly-leaves) somewhat regretfully, for when we come to those for humans there will be none so palatable.

#### COMMENTS ON A DELETION

I regret to say that not only bookworms but less innocent destroyers have been at the copy which is here being commented upon. The worms made only marginal notations and left the text intact; but someone has very neatly removed pages 333-336 of Part I: whether one of the many owners of the volume or a borrower, whether by order of the Duke or ducal censor, cannot now be known. If it was the censor, he may have thought the excised matter was too much like that of the very books which the Duke's physician so heartily condemns. The two sheets were cut out long ago, for the edges of the cut are browned by time, and it is quite possible that the excision dates at the time of publication. Consulting the table of contents, it is clear that the excised pages dealt exclusively with remedies for impotence, love potions, charms, and other magic. Was some lovesick swain or eager maiden guilty of a theft? Hardly. Some old fellow married to a young wife? More likely. Such marriages were more frequent then than today. It is especially likely because much attention is elsewhere in the book paid to sterility in women. But we shall never know who cut out the two leaves. It is the only defect of the text.

### WAS THIS A FIRST COPYRIGHT?

Before proceeding to the text itself it is interesting to observe that the author gives notice on the title page, just above the imprint, that the book is by royal authority protected against copying for twenty years—seemingly an early example of the copyright principle.\*

<sup>\*</sup> A personal communication to the editor from William Brown of the copyright office at Washington, D. C., states:

<sup>&</sup>quot;It does not appear that copyright in the modern sense of the term existed in any country during medieval or late medieval times. There was a system of licensing by the Crown for the printing of books, but this was mainly to raise revenue and exercise censorship. The first real copyright enactment for the protection of authors was the well known British statute of Anne entitled 'An Act for the Encouragement of Learning,' passed in 1710."

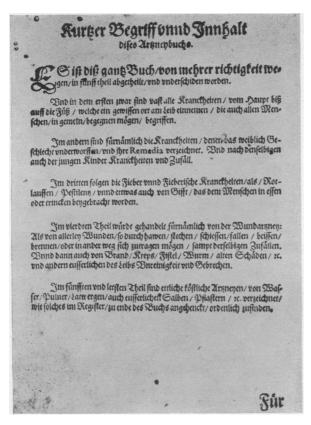


Fig. 4.—Outline of Contents. Translation follows: BRIEF COMPENDIUM AND CONTENTS of this Book of Medicine

of this Book of Medicine

For the purpose of greater accuracy, this whole book [it contains 1,000 pages] has been divided into five distinct parts:

The first dealing with almost all maladies from head to foot, occurring in particular portions of the body, common to men;

The second part deals mainly with maladies peculiar to women, and their remedies, followed by those for diseases and accidents of children;

The third deals with fevers and maladies attended with fever, such as erysipelas and pestilence, with some directions as to antidotes for poisons that may have been taken in food or drink;

The fourth part deals with medicaments in surgery, chiefly of such wounds as have occurred through flogging, cutting, shooting, falling, bitting, burning, and the like, including their contingencies; likewise gangrene, cancer, fistula, worm-ulcer, old wounds, etc., as well as other external ills of the body, uncleanliness, and bodily infirmities.

infirmities.

The fifth and last part deals with sundry excellent remedies, fluids, powders, electuaries, as well as salves and plasters, etc., as shown by the accurately compiled Register [table of contents].

Why, we may well ask, was this book so protected; and why, indeed, was it compiled at all? The answer is given in the preface, where Court Physician Gäbelthouer—after referring to Adam and Eve's disobedience as the origin of all illsexplains that prior to the printing of this Artzneybuch, there were many so-called medical books extant, some of them purporting to be the genuine work of the famous physicians whose names they bore but which were in reality pirated and garbled texts, shamefully disfigured by mercenary printers and publishers—the preface names several of them—with numerous additions and changes which might increase the sales. The Duke and his Hofmedicus now proposed to chase these pirates out of business by publishing a protected (copyrighted?) collection of prescriptions chosen

by an accredited physician of unimpeachable standing. The author therefore warns the public against all other medical works, which are likely to do more harm than good. This book, he states, is the only safe guide. It is the light thrown by this preface on the origin of the book that gives the work much of its interest; it is clear that we are not here dealing with the brazen impudence of some quack, but with the highest medical and political authority of Württemberg in 1594 (the year of the preface). The astonished modern reader can only ask himself what sixteenthcentury quackery might have been like, if this Artzneybuch represents the best that was then known to regular or scientific medicine. Besides, in view of the presumable copyright, it is evident that the book was most deliberately compiled in the thick of a fight against irregular practices. Apparently up to that time there had been no copyright or other protection against piracy; hence the Duke secured for Court Physician Gäbelthouer a royal grant of protection for twenty years. The Duke had apparently, as we gather from the preface, grown exceedingly tired of the unscrupulous practices of the medical fakirs of his day—or tired perhaps of the importunities of his protégé—and had commanded Hofmedicus Gäbelthouer, the respected physician of his family for many a long year, to compile an entirely trustworthy work which should embody the best and most reliable of all the remedies for bodily and mental ills that were up to that time found effective, rejecting everything else.

#### OTHER QUESTIONS WHICH ARISE

The present Artzneybuch was the result. Heaven knows what, considering the status and the contents of this work, the others must have been! The medicus goes into the most effusive details concerning the wisdom of his ducal master's decision in this and other matters leading to civic and other improvements, and cites the acts of wise rulers and the wisdom of the ancients generally, with regard to the science of medicine and the cures of disease; he stresses especially the custom of the Egyptians in exposing their sick or injured persons out in the streets, hopeful that one of the passers-by, formerly likewise afflicted, could prove helpful with counsel or medicaments.

Part I of the Artzneybuch begins abruptly, with no introductory matter, with prescriptions for diseases of the head and neck. The first lines of page one contain the following remedy for headache:

"Mix woman's milk with rosewater and apply to the head with a soft cloth. For very severe pains, add leek to this mixture."

The frequent recurrence of woman's milk in the prescriptions, the effectiveness of human urine, especially of babies and virgins, the potency of excrement both human and animal, are features of this highly reputable work which one is inclined to regard with astonishment, until it is remembered that even today, in Europe and here and there among foreigners now living in

America who have brought the traditions of their folklore medicine with them, such remedies are still used.

For the use of woman's milk, virgin's urine, and a variety of excrements, it is possible that the new modern psychology may have an explanation; the Freudians can certainly be counted on to trace it directly to the sexual instinct; and some habits, in eating, of dogs and other animals may offer a clue.

As the reader proceeds through the prescriptions which will be here quoted, other questions will arise: for instance, whether or not the practitioners of that day were conscious of the true and the bogus portions of some of their remedies, holding perhaps that the bogus ingredients might be useful psychically while the really valuable portion did the rest. For instance, there is constantly to be found a direction to apply "as hot as the patient can stand it" some poultice composed of excrement. The psychic value of a bad smell and a disgusting taste is not entirely obsolete in the twentieth century; and the value of hot applica-tions is far from being even obsolescent. There is also the recurrent direction to bake or otherwise cook the ingredients or some of them; in some cases the motive for this can be dimly perceived, again it seems to be hocuspocus. These and other considerations will occur to the reader as he goes along, but as he reads let him be not too quick to scoff: there is a good deal of the sixteenth century with us yet.

The following are chosen here and there, almost at random, from the entire work.

#### SIXTEENTH CENTURY REMEDIES FOR HEAD AND NECK CONDITIONS

The first paragraphs of page 1 contain the following:

"For headache, mix woman's milk with rosewater and apply to the head with a soft cloth. For very

and apply to the head with a sort cloth. For very severe pains, add leek to this mixture."

"For continual pain of the head, secure the skin of a stag, and bind about the head (of the warmth of the living animal; neither warmer nor colder), and keep it on day and night until relief follows."

"For almost insufferable pains in the head, secure a number of arrived seeds; mash to a fine pulp and mix

number of apricot seeds; mash to a fine pulp and mix with cobwebs, adding a little rosewater; apply this delicate substance to the aching parts.'

"For dizziness, the most effective remedy is a few drops of the blood of turtle doves in a small glass of wine, to which would best be added a few blooms of hellebore and coltsfoot. The patient is to drink no other wine, however, and to refrain from garlic, onions, sauerkraut, and fat, and to be very moderate in all his eating.'

A remedy for nausea and dizziness which the author recommends as almost infallible, since he has tried it with the greatest success for fortynine years of practice, is the following:

"Take the brains of a fox, caught by dogs; bake it, and give it to the patient on an empty stomach of mornings, without any other food for some three or four hours. This remedy is most effective when the brain is secured from a fox caught in the forenoon when the moon is crescent in Virgo. To bring about complete cure, three separate fox brains are to be consumed successively, the animal always to be caught in the forenoon, by dogs. To add a little

vinegar and galanga root while the brain is boiling before being baked, is excellent. Avoid exercise during the week in which the cure is to be effected; drink very little wine and no strong wine whatever; wear corals around the neck day and night, and a cure is certain, with God's help. This remedy applies to men only. For a woman, especially a young woman, take a young female dog, cut it open, carefully secure its gall bladder, prick it and let the gall ooze into a clean tin vessel; add a little vinegar, and give to the patient to drink. But make sure to hold your hand over her mouth after she has drunk the remedy; otherwise she is likely to vomit it; if, nevertheless, that happens, you must try it again with another female dog's gall. This remedy is also effective with some men excepting that the dog must be made. If some men, excepting that the dog must be male. If it seems impossible for the patient to retain the gall, add sugar until the bitter taste is sufficiently over-

Yet another infallible remedy for continual dizziness is the following:

"Take a young swallow from her nest when the crescent moon is in Virgo; cut off the head and let the blood run into a vessel containing white frankin-cense; stir thoroughly until the fluid thickens; then give it to the patient when the moon is waning, three days in succession. But by all means see to it that the patient during the progress of the cure does not become angry at anything."

For *epilepsy*, the following remedies are recommended as infallible:

- 1. "The droppings of wild geese, burned to a powder in a glazed pot; give to the patient night and morning in wine or beer, in quantity equal to a gold guilder. This is also excellent for fevers of all sorts."
- 2. "The marrow of a female deer, drunk in warm beer."
- 3. "Skin a small mouse, remove its entrails except the lungs and liver; burn in a new unglazed pot; mash to powder; mix with water of linden blossoms; give a tablespoonful every morning; half portion for children." [And to this prescription the medicus adds "Probatum" (it has been proved).]

4. "At the first signs of epilepsy, as the very best preventive, obtain the heart of a stork and give it to the patient to eat." [The text does not state whether raw or cooked. "Probatum" is again the commentary.]

- 5. "Very serious cases are effectively treated as follows: Take a handful of peacock droppings, mix in wine to the weight of a pound. As soon as the patient is capable of it, make him drink about a third of this quantity; put him to bed and secure a good sweat. After that, give him the second third of the mixture and again induce a sweat. After another hour, give him the remainder of the mixture and cover him heavily for a final sweat. This is practically certain to effect a permanent cure."
- 6. "Take the right eye of a wolf, the left of a shewolf; dry, and hang about the neck of the patient, who must wear them for three months continuously, during which time he must neither bathe nor other-wise get his body wet."

#### Treatment of insanity:

1. "Cut the patient's hair close to his head (shave it off completely by preference); then cut a ram's liver in two and bind it while yet warm on the patient's head."

2. "Or: Cut in two a living rooster and apply simi-

2. Or: Cut in two a living rooster and apply similarly; or a young she-wolf, if you can procure one; or apply a sheep's lung in the same way."

3. "In case of complete insanity, take a freshly baked loaf of bread; remove the soft inner part and replace with a complete ox-brain; bind on the patient's head and it will cure his brain and restore his mind."

4. "Or: Rub the patient's hands and feet well with vinegar; give him a thorough enema; then rub a black chicken [it does not state whether dead or alive] over his shoulders and head, especially the forehead. That

will bring relief. Seeds of poppy and bulrushes mixed in white of egg and woman's milk, applied to the head

and put in ears and nostrils, will speed the cure."
5. "Cut off with one blow the head of a black strong ram that has never coupled. Make sure not to kill him otherwise. Boil with skin, wool and all, until the brain is well done. Then put into a pan well filled with flour. Add the following spices, well pounded and mixed. Then roast all thoroughly. Compel the madman to eat it, any way you can, preferably a third of it three days in succession, whether willing or not. The spices which you must be sure to add are the following: cinnamon, nutmeg, nutmeg flower, clove, and ginger, ten grains of each. See to it that he goes to sleep after eating the mixture; the heavier the sleep the better."

Treatment of insomnia:

1. "Mix in rosewater, the water from the entrails of a red chicken, and woman's milk, equal portions of each; apply lukewarm on a soft cloth to the temples."

2. "Take the grease from an ass's ear—it matters not what kind of ass—and apply to the patient's

3. "Fresh goose grease, first heated in a tin can placed in hot water, then rubbed over the temples on going to bed."

Scabby or scurfy head:

1. "Cut off all hair; soak head in lukewarm lyewater. Secure some white dust from the miller, mix it with the white of an egg to a sort of cake; apply on cloth in little patches where the scabs are. Every day, after removing the little patches, wash the head with the urine of a red cow (make sure that the cow is red all over) mixed with a little alum. If the scabs are very putrid, increase the amount of alum."

2. "Procure some small toads of the kind that ap-

pear after a rain, burn them to powder, put in water mixed with lye; apply to the scurfy parts of the head."

3. "Take nine red snails, put into a new pot, add a handful of salt, and let stand for several days. take the fluid and rub it well into the scabs, but be very careful not to get any of it into the patient's eyes. Use every day or every other day."

University of California at Los Angeles.

(To be Continued)

# CLINICAL NOTES AND CASE REPORTS

SPONTANEOUS RUPTURE OF SPLEEN— FOLLOWING MALARIA THERAPY FOR GENERAL PARESIS

REPORT OF CASE

By EDWARD W. TWITCHELL, M. D. San Francisco

THE patient was a 32-year-old male, who exhibited A typical physical mental and laboratory findings of general paresis in a stage of rather marked mental dilapidation. Long-continued treatment with mercury, bismuth, and arsenicals had been without avail.

On July 20, 1929, patient was given, intravenously, about five cubic centimeters of blood, taken from another patient with inoculation malaria. On September 7, 1929, as there had been no response in the way of fever, five cubic centimeters of citrated blood, obtained from a third patient, was given into the buttock. The following day his temperature rose to 104.5 rectal. Fever, tertian and quotidian, con-tinued. Numerous malarial parasites were discovered on several examinations.' After eighteen paroxysms of fever, which he stood quite well, showing no particular exhaustion, on the morning of September 10 he was given ten grains of quinin by capsule and

shortly thereafter vomited. Following the vomiting he had a collapse, which was treated with stimulants and quinin in suspension, given at the rate of three grains every three hours. The next day, however, the abdomen began to distend without pain, and efforts were made all this day to relieve the distention by stimulant enemata. The next morning the distention persisted and, in addition, the patient began to vomit. Dr. Thomas O'Connor, on being called, suggested the possibility of an exploded appendix. Patient was taken to a hospital, where that evening an incision was made in the appendix region and the abdominal cavity was found full of blood. The wound was closed, and a midline incision was made higher up. Through this means it was discovered that there was a large accumulation of coagulated blood in the neighborhood of the spleen and soon an irregular tear was felt on the lower surface of that organ. The patient being in a greatly exhausted condition the wound was closed without any further investigation. He died the following morning.

Pathological Report.—(By Dr. A. M. Moody.) There is free blood in the peritoneal cavity and a large amount of clotted blood adherent to the spleen and

between it and the diaphragm.

The spleen is soft and has the following dimensions: 15.5 centimeters long by 10.5 centimeters wide and from 3 to 5.5 centimeters thick. Freed of blood clots and after fixation it weighs 480 grams. It crepitates and floats in water. There is an irregular tear, 8 centimeters long, in the capsule extending obliquely from a point in the hilus 5 centimeters below the upper end to a point 4 centimeters from the lower end on the posterior edge. The torn region is irregularly covered with clotted blood.

On section, after fixation, it contains scattered small regions of infarction at the hilus and beneath the capsule over the cortex. There are numerous gas spaces

disseminated throughout.

Smears of the fresh spleen pulp contain frequent Gram-positive bacilli (B. welchii), but no whole malarial parasites are found after a thorough search of smears stained with Wright's stain. There are, however, scattered deposits of pigment and blue-staining fragments, suggestive of disintegrated plasmodia.

Sections of spleen contain hyperplastic pulp with scattered regions of necrosis, leukocytic infiltration, pigmentation, and a decrease in lymphocytes. There is no cellular reaction about the gas spaces.

The brain is characteristically paretic in type. There is a moderate perilobular hepatitis, but other organs in the abdominal cavity are devoid of noteworthy alterations.

Death resulted from anemia secondary to hemorrhage from the spleen, following its spontaneous rupture.

909 Hyde Street.

Playgrounds Are Becoming Epidemic.—The number of towns and cities in the United States and Canada reporting play areas under leadership to the Playground and Recreation Association of America grew last year to nearly a thousand, and more than 1100 new play areas were opened within the year. Eight hundred and ninety cities reported a total of 23,000 recreation leaders and a total expenditure of nearly \$33,540,000 for public recreation. During the year about 14,000 persons were enrolled in training courses for recreation leadership.—Bulletin United States Children's Bureau.

Thirteen Million Profit of the Mayo Clinic to Be Used for the Advancement of Medical Science.—Dr. William Mayo of Rochester, Minnesota, announced April 11 that the fortune estimated at \$13,000,000, which he and his brother have amassed at their famous clinic will be used for the advancement of medical science. It will go to the Mayo Foundation medical science. It will go to the Mayo Foundation for Medical Education and Research, he said, which already is training three hundred surgical hands to carry on the work of its two sponsors.—Illinois Medical Journal, June 1930.